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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 10/042,395 | 01/11/2002 | Ronald Steiger | 713-612 | 5486 |
| 7590 | 11/21/2003 | | EXAMINER | |
| LOWE HAUPTMAN GILMAN & BERNER, LLP Suite 310 1700 Diagonal Road Alexandria, VA 22314 | | | HWU, DAVIS D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3752 | |
| | | | DATE MAILED: 11/21/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|-----------------|-----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/042,395 | STEIGER, RONALD |
| Examiner | Art Unit | |
| | Davis Hwu | 3752 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 March 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-10 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 and 7. 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinstein in view of Dembovsky.

The patent to Weinstein discloses a spray system for coating liquids comprising a liquid atomizer in the form of a rotating nozzle element to spray the coating liquid onto an object to be coated, characterized by a cooling unit cooling a component of the spray system by means of a fluid, cooled coolant during spray operations. Weinstein does not disclose that the cooling aspect reduces or prevents the coating liquid's adhesion and/or the drying rate and layering on a surface of the component. Dembovsky teaches a spray system in which a spray nozzle is cooled in order to reduce the thickness of the adhering layer of spray liquid. Thus, it is known in the art through the teaching of Dembovsky that cooling the atomizing element as carried out in the Weinstein patent will reduce or prevent the coating liquid's adhesion, drying rate, and layering onto a surface of the component. The device of Weinstein is fully capable of carrying out the method of claims 1 and 2.

3. Claims 1, 3-5, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning in view of Dembovsky.

The patent to Browning discloses a spray system for coating liquids comprising a liquid atomizer in the form of an irrotational nozzle element to spray the coating liquid onto an object to be coated, characterized by a cooling unit cooling a component of the spray system by means of compressed air, cooled coolant during spray operations. Browning does not disclose that the cooling aspect reduces or prevents the coating liquid's adhesion and/or the drying rate and layering on a surface of the component.

Dembovsky teaches a spray system in which a spray nozzle is cooled in order to reduce the thickness of the adhering layer of spray liquid. Thus, it is known in the art through the teaching of Dembovsky that cooling the atomizing element as carried out in the Browning patent will reduce or prevent the coating liquid's adhesion, drying rate, and layering onto a surface of the component. The device of Browning is fully capable of carrying out the method of claims 1 and 3-5.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Ramser et al., Coats, and McComas et al. are pertinent to Applicant's invention.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis Hwu whose telephone number is 703-305-1663. The examiner can normally be reached on M-F 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Y. Mar can be reached on (703)308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0861.



Davis Hwu